

Abstract

Method and apparatus for in-place updating an old version of a file stored on a storage device to form a new version, wherein the old version includes blocks. The form of the old version is determined for indicating at which end of the old version free space is located, as well as determining whether an update package is a corresponding update package for the form. If the update package is a corresponding update package, blocks in the old version are updated according to the update package, giving rise to a new version having an alternative form, where free space in the new version is at an opposite end to the old version.